# Super S® SuperDraulic AW Hydraulic Fluid

**Super S SuperDraulic AW Hydraulic Fluids** are premium multi-grade high viscosity index anti-wear hydraulic oils formulated to meet the demands of modern hydraulic systems operating at low or widely varying temperature ranges. The combination of high VI base stocks and a carefully balanced additive system chosen to provide excellent trouble free, extended drain protection up for 5,000 hrs in well maintained systems.

**Super S SuperDraulic AW Hydraulic Fluids** exceeds the performance standards for use in most modern high pressure hydraulic systems operating across a wide temperature range. They contain a synergistic combination of antioxidant and rust and oxidation (R&O) inhibitors that stabilize the system providing extended drain service effectively reducing maintenance costs.

**Super S SuperDraulic AW Hydraulic Fluids** demonstrate excellent thermal stability for protection against oil degradation and deposit formation leading to a cleaner, more efficient operating environment. They are also easily filtered even in the presence of water showing excellent demulsability. The highly shear stable viscosity modifier offers multi-grade performance in low temperatures making it an excellent general lubricant and a suitable service fill for most equipment calling for a HVI AW hydraulic fluid.

## RECOMMENDATIONS/SPECIFICATIONS

*ASTM 6158*
*Fives Cincinnati P-68, P-69, P-70*
*Denison HF-0, HF-1 and HF-2*
*Sperry Vickers M2950-S and I-286-S*
*DIN 51524-3, ISO 11158 HM*
*DIN*
*51506VDL*
*GM LS-2*
*US Steel 126-127-136*
*Eaton Brochure 03-401-2010*
*Swedish Standard SS 15 54 34, SMR 1996-2*
*Siemens TLV 9013*
*US MIL-PRF-17331J*

## FEATURES/ BENEFITS

- **Super S SuperDraulic AW Hydraulic Fluids** are available:
- viscosity grades from ISO VG 15 to ISO VG 220
- >5000 hr on ASTM D-943
- Exceptional anti-wear protection for equipment operating under high pressures and loads
- Oxidation inhibitors provide sludge and deposit control, and longer service life
- Superior Rust and corrosion protection for all system components.
- Excellent water separation and demulsibility
- Excellent anti foam and rapid air release

## APPLICATIONS

- **Super S SuperDraulic AW Hydraulic Fluids** are recommended for applications calling for anti wear, rust and oxidation inhibited oils
- Hydraulic systems
- Air compressors
- Industrial bearings,
- Circulating systems, splash, bath and ring lube systems for bearings and gears
- A myriad of assorted industrial applications: chains, hoists, machine tools et al
- Gear sets not requiring an EP gear oil
- Bath, Splash Circulating or Mist systems
- AW 15 and 22 are manufactured from specially selected, highly refined, low pour point base stocks and include a pour point depressant for operation in unusually cold conditions. The low pour point minimizes filter plugging in the absence of synthetics
- AW 32 , 46, & 68 are premium anti- wear hydraulic fluids with outstanding low temperature characteristics and meet Fives P-68, 69, & 70 respectively. They are specially formulated for use in mobile equipment hydraulic circuits where wide temperature ranges are encountered.
  (Cherry pickers, bucket trucks and marine hydraulics).

## Special handling, notices or warnings

Use the same care and handling as for any petroleum product.

# Super S® SuperDraulic AW Hydraulic Fluid

TECHNICAL PRODUCT INFORMATION

## Typical Characteristics

| | Super S SuperDraulic AW Hydraulic Fluid | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *Property* | *Test Method ASTM - D* | *ISO Viscosity Grades* | | | | | | | |
| | | 15 | 22 | 32 | 46 | 68 | 100 | 150 | 220 |
| AGMA Grade | | | | | 1 | 2 | 3 | 4 | 5 |
| Pour Point, °C/°F | 97 | -48/-54 | -42/-43.6 | -37/-35 | -37/-35 | -37/-35 | -35/-31 | -33/-27 | -33/-27 |
| Flash Point °C/°F | 92 | 200/392 | 202/396 | 204/400 | 207/405 | 232/450 | 241/465 | 250/482 | 256/493 |
| cSt @ 40°C | 445 | 16.4 | 23.7 | 31.5 | 47.8 | 66 | 100 | 148.5 | 217.6 |
| cSt @ 100°C | 445 | 2.7 | 4.8 | 5.3 | 7.0 | 8.4 | 11.0 | 19.0 | 25.11 |
| Viscosity Index | 2270 | 90-120 | 90-120 | 90-120 | 90-120 | 90-120 | 90-120 | 90-120 | 90-120 |
| Color | 1500 | L1.0 | L1.0 | L1.0 | L1.0 | L1.5 | L1.5 | L1.5 | L1.5 |
| Oxidation Life Hrs to 2.0 Acid No. | 943 | 5000 | 5000 | 5000 | 5000 | 5000 | 5000 | 5000 | 5000 |

Typical test data are average values only.
Minor variations which do not affect product performance are to be expected during normal manufacturing.